IV. Operation Desert Strike

IV.1 Overview

In early 1996, despite warnings from the United States, Iraq moved 40,000 troops into northern Iraq threatening the Kurdish population. In response, the president ordered a strike on military targets posing a threat to coalition aircraft in the no-fly zone.

On August 31, 1996, elements of the Iraqi Army attacked and captured the town of Irbil in the Kurdish autonomous region of northern Iraq. This renewed Iraqi aggression, led by a Republican Guard mechanized division with the support of regular army troops, alarmed the United States and coalition forces in the region. Rhetoric from Baghdad threatened Gulf Cooperation Council (GCC) partners if they assisted the United States in retaliation, while Iraqi air defense forces launched surface to air missiles against USAF fighter aircraft patrolling the northern and southern "no-fly" zones. In response to the seizure of Irbil, the US Central Command assessed an increased threat to America's interests and moved quickly to bolster its ability to protect those vital national interests on the Arabian Peninsula. In close consultation with the National Command Authority (NCA), Central Command began to develop appropriate military responses to deter further aggression.

Saddam's actions suggested a new willingness to use overwhelming conventional forces to continue their oppression of the Kurds. This willingness increased the threat of aggression against allied forces enforcing United Nations resolutions and international relief workers delivering humanitarian supplies.

To prevent enhancement of offensive capabilities in the south and prepare for potential follow-on operations, the NCA directed an immediate military response. In consultation with its coalition partners, Central Command evaluated alternative responses from among those available in the region. Against a requirement to send a clear signal of international condemnation for the latest violation of UN resolutions, Central Command planned and executed Operation Desert Strike.

IV.2 Timeline

As opposed to the other cases, there was not a long sequence of specific events leading up to Desert Strike. No doubt the US government conveyed warnings to Iraq through diplomatic channels. However, there were not the public warnings that alert markets that a crisis is impending. For this reason, it was impossible to carry out an Event analysis as in the other cases under review.

September 2, 1996

A coordinated cruise missile attack was launched against the Iraqi air defense infrastructure, including surface-to-air missile sites and command and control nodes in southern Iraq. USS Laboon (DDG 58) and USS Shiloh (CG 67), on station in the Gulf as part of Task Force 50, fired 14 of the 27 cruise missiles while Air Force B-52s, escorted by F-14s from USS Carl Vinson (CVN 70), fired 13 conventional air-launched cruise missiles (CALCMs).

September 3, 1996
A second strike of 17 Tomahawks from destroyers USS Russell (DDG 59), USS Hewitt (DD 966), USS Laboon and nuclear-powered attack submarine USS Jefferson City (SSN 759) was conducted. USS Enterprise (CVN 65) departed the Adriatic Sea on order of the National Command Authority and conducted a high-speed transit through the Suez Canal, arriving in the theater two days later.

IV.3 Oil Market Developments

Oil prices were increasing prior to the US missile launch on Iraq (Figure 11). As the New York Times noted ("Oil Prices Advance After UN Delays Iraq's Entry in the Market," September 3, 1996, p. D-6), much of this increase stemmed from the United Nation's delays in letting Iraq sell oil again. The dollar also rose, and the shares of oil companies rose on foreign exchanges, benefiting from renewed tension in the Middle East. At this time it was clear that traders had been expecting Iraq's first oil sales since the Persian Gulf War to hit markets in the next several weeks. Traders noted (Financial Times, The Lex Column: "Flying High," September 3, 1996, p. 1) that uncertainty over the timing of Iraqi crude exports, which had been expected later in September, should underpin oil prices at least in the short-term.

On September 3, the Financial Times (Robert Corzine, "Delay to Iraqi Sales Boosts Oil Prices," September 3, 1996, p. 5) also noted that any allied military action against Iraq could give a further boost to oil prices (which had been rising sharply over the past month due to unease about the tougher US position towards Iran and the wider potential for Middle East instability). At this time (September 3) concern over increased world oil prices and expectations of a rise in US interest rates led to a rise in the US dollar against the D-mark and the yen (Appendix C).

On September 5, The Financial Times (Robert Corzine, "Oil Price Yo-Yos as Traders Digest News From Iraq," September 5, 1996, p. 3) noted that international oil companies and traders continued to adjust their buying strategies to reflect the widespread expectation that Iraqi oil will not be a factor in world markets this year. Many traders had already shifted their attention to possible alternative sources. Much debate centered on whether countries outside the Organization of Petroleum Exporting countries could step in to make up for any shortfall.

IV.4 Key Events for Economic Benefit Calculations

September 2, 1996
A coordinated cruise missile attack was launched against the Iraqi air defense infrastructure.

September 3, 1996
A second strike of 17 Tomahawks from destroyers was launched.

September 4, 1996
The key developments on this date were the decline from September 3 in the NYMEX spot rate. Also on September 4 the spot rate had fallen below the first forward contract. The first forward contract was also smaller than the second forward contract. These patterns suggest that the markets quickly equilibrated once naval operations were concluded. Apparently, traders assumed that the US mission had been accomplished and there would be no Iraqi follow-ups that would jeopardize stability in the region.

September 16, 1996

By September 16, the second future contract (Figure 12) was trading at a sizable premium over the first forward contract. This pattern suggests that the markets had assessed the military situation in the Gulf and had concluded that stability was assured for the foreseeable future. The markets heavily discounted the possibility of increased Iraqi destabilization.

Figure 11

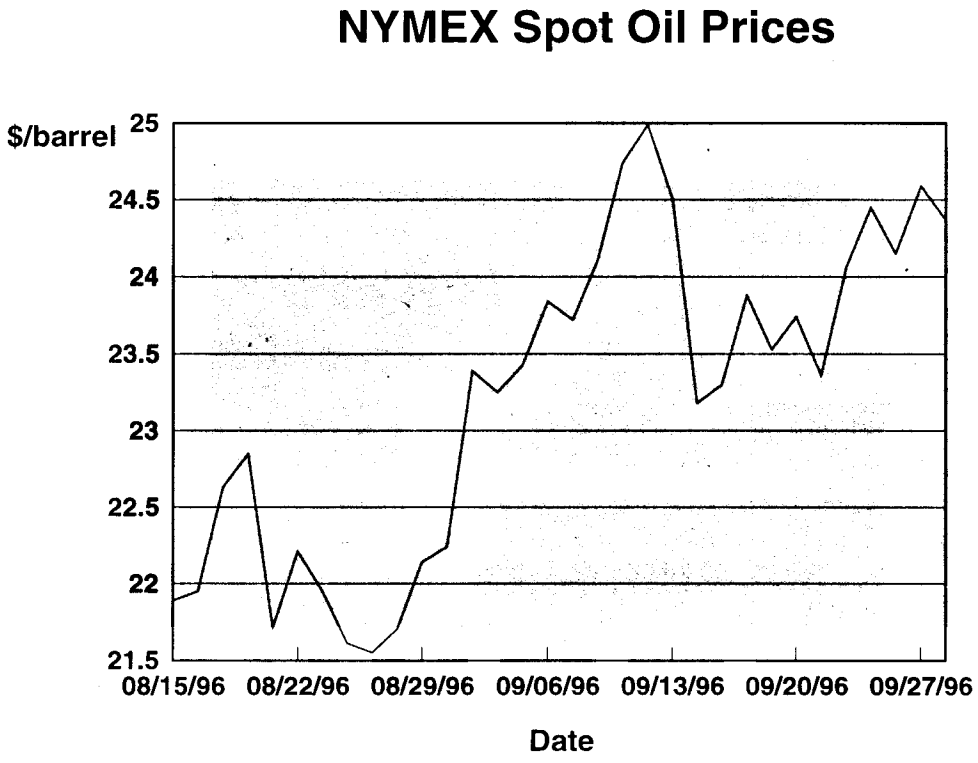
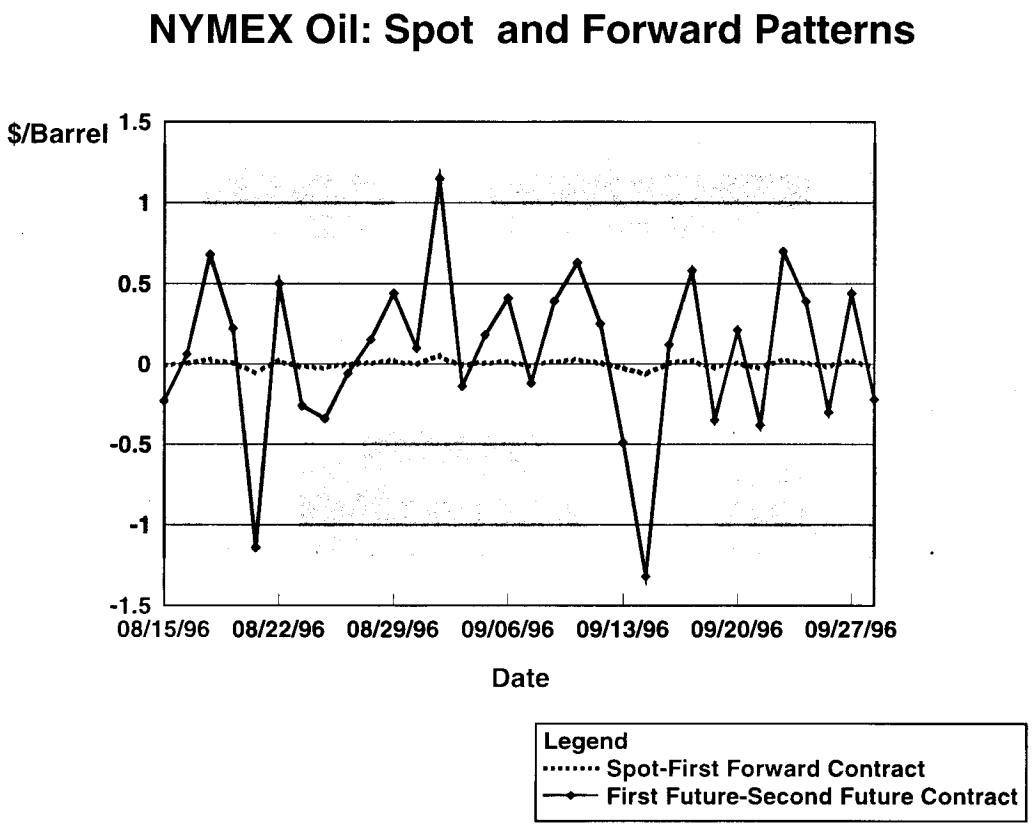


Figure 12



IV.5 Calculation of Economic Benefits

Initial tests of the VAR Model for the United States economy suggested that both the NYMEX spot oil price (NYMEXS) and the dollar/yen exchange rate (YEN) were statistically significant. The dollar index itself (DI) was not statistically significant and was hence omitted from the analysis. Based on the Schwartz Bayesian Criterion, the optimal VAR order was set at 1.

In addition to the NYMEX and YEN rates, the variables used in forecasting the US economy were: gross fixed capital formation (USAINVTS), Investment in Machinery and Equipment (USAIMCHS), and government final consumption (USAGOVTX).

IV.5.1 Assumptions

Using these variables and the forward rates associated with the dollar/yen and NYMEX oil prices for September 3, September 4 and September 16, estimates were made of the differential in US GDP that was implied by the start and conclusion of naval operations. The first calculation is the short-run equilibration following cessation of operations. That is, the United States GDP was estimated on the basis of the forward prices prevailing on September 4 and September 3.

The differential GDP (September 4 – September 3) projected by these two patterns of dollar/yen and NYMEX rates is the short-run impact of naval operations. Assuming the markets had fully equilibrated by September 16, as second set of calculations was made, again using the forward rates of the dollar/yen and NYMEX on that date. The September 3 forecasts of US GDP were then subtracted from these (September 16 – September 3), to arrive at the full impact of Naval operations.

IV.5.2 Findings

The model shows continued gains over time (Table 3). However it is unlikely that the true impact of naval operations lasted much past 1997. A safe estimate is that the benefits of naval forward presence were somewhere between 2.0 and 4.2 billion 1995 dollars.

IV.6 Conclusions

This is an interesting case in that it was of very short duration and came at a time when oil markets were on the upswing. There was also considerable uncertainty on the manner in which Iraq would respond to the operation. Despite these rather adverse conditions, Naval operations were able to play a significant role in stabilizing oil markets, thus producing again significant economic benefits to the United States economy.

Table 3

Operation Desert Strike:
Naval Crisis Response Impact
on the United States Economy: Oil Price/Yen Effects

(Billions 1995 Dollars)

	Initial Impact A	Impact Equilibrium B
Impact by Quarter		
1996Q3	0.0	0.2
1996Q4	0.0	0.2
1997Q1	0.1	0.2
1997Q2	0.1	0.3
1997Q3	0.2	0.5
1997Q4	0.3	0.6
1998Q1	0.3	0.6
1998Q2	0.3	0.6
1998Q3	0.3	0.5
1998Q4	0.3	0.5
1999Q1	0.3	0.5
1999Q2	0.4	0.5
1999Q3	0.4	0.5
1999Q4	0.4	0.5
Impact Through 1997	0.7	2
Impact Through 1998	1.9	4.2
Impact Through 1999	3.4	6.2

Notes: The statistical output of the ARDL/error correction analyses and VAR models on which these results are based are contained in a separate set of appendices available from the authors.

Initial Impact = (September 4 – September 3; Impact Equilibrium = (September 16 – September 3).

Initial Impact derived by subtracting the United States' GDP estimated on the assumption of September 3 oil and dollar/yen forward prices from that estimated on the basis of September 4 oil and dollar/yen prices.

Impact Equilibrium derived by subtracting the United States' GDP estimated on the assumption of September 3 oil and dollar/yen forward prices from that estimated on the basis of September 16 oil and dollar/yen prices.